

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A method of manufacturing an oxide superconducting wire, comprising:

a step of preparing a wire formed by covering raw material powder of an oxide superconductor with a metal; and

a heat treatment step of heat-treating said wire in a pressurized atmosphere having a total pressure of at least 1 MPa and less than 50 MPa in the heat treatment, wherein

pressurization is started from a temperature reducing 0.2 % yield strength of said metal below said total pressure in said heat treatment at a heat-up time before the heat treatment in said heat treatment step; and

wherein the speed of said pressurization is at least 0.05 MPa/min.

2. (Cancelled).

3. (Currently Amended) The method of manufacturing an oxide superconducting wire according to claim [[2]] 1, wherein

the speed of said pressurization is at least 0.1 MPa/min.

4. (Previously Presented) The method of manufacturing an oxide superconducting wire according to claim 1, wherein

said heat treatment step is carried out in an oxygen atmosphere, with a partial oxygen pressure of at least 0.003 MPa and not more than 0.02 MPa.

5. (Previously Presented) The method of manufacturing an oxide superconducting wire according to claim 1, wherein

said raw material powder of said oxide superconductor includes a Bi2223 phase, and
said wire is annealed in an oxygen-containing atmosphere of a temperature of at least 300°C and not more than 600°C in said heat treatment step.

6. (Previously Presented) The method of manufacturing an oxide superconducting wire according to claim 1, further comprising a step of twisting said wire in advance of said heat treatment step.

7. (Original) The method of manufacturing an oxide superconducting wire according to claim 1, wherein

said wire is not rolled.

8. (Previously Presented) The method of manufacturing an oxide superconducting wire according to claim 1, wherein

a wire formed by covering a ceramic-covered rod, obtained by covering said raw material powder with ceramic, with said metal is prepared in said step of preparing said wire.

9. (Previously Presented) The method of manufacturing an oxide superconducting wire according to claim 1, further comprising a step of molding said wire into a coil in advance of said heat treatment step.

10. (Previously Presented) The method of manufacturing an oxide superconducting wire according to claim 1, wherein

said wire is held under a decompressed atmosphere before said pressurization in said heat treatment step is started.

11. (Currently Amended) A method of manufacturing an oxide superconducting wire, comprising:

a step of preparing a wire formed by covering raw material powder of an oxide superconductor with a metal including silver; and

a heat treatment step of heat-treating said wire in a pressurized atmosphere having a total pressure of at least 1 MPa and less than 50 MPa in the heat treatment, wherein

pressurization is started after the temperature of said atmosphere exceeds 400°C at a heat-up time before the heat treatment in said heat treatment step; and

wherein the speed of said pressurization is at least 0.05 MPa/min.

12. (Previously Presented) The method of manufacturing an oxide superconducting wire according to claim 11, wherein

said pressurization is started after the temperature of said atmosphere exceeds 600°C at the heat-up time before the heat treatment in said heat treatment step.

13. (Currently Amended) A method of modifying an oxide superconducting wire, comprising a heat treatment step of heat-treating an oxide superconducting wire formed by covering an oxide superconductor with a metal in a pressurized atmosphere having a total pressure of at least 1 MPa and less than 50 MPa in the heat treatment, wherein

pressurization is started from a temperature reducing 0.2 % yield strength of said metal below said total pressure in said heat treatment at a heat-up time before the heat treatment in said heat treatment step; and

wherein the speed of said pressurization is at least 0.05 MPa/min.

14. (Cancelled).

15. (Currently Amended) The method of modifying an oxide superconducting wire according to claim [[14]] 1, wherein

the speed of said pressurization is at least 0.1 MPa/min.

16. (Previously Presented) The method of modifying an oxide superconducting wire according to claim 13, wherein

said heat treatment step is carried out in an oxygen atmosphere, with a partial oxygen pressure of at least 0.003 MPa and not more than 0.02 MPa.

17. (Previously Presented) The method of modifying an oxide superconducting wire according to claim 13, wherein

said oxide superconducting wire includes a Bi2223 phase, and

said oxide superconducting wire is annealed in an oxygen-containing atmosphere of a temperature of at least 300°C and not more than 600°C in said heat treatment step.

18. (Previously Presented) The method of modifying an oxide superconducting wire according to claim 13, wherein

said oxide superconducting wire is held under a decompressed atmosphere before said pressurization in said heat treatment step is started.

19. (Currently Amended) A method of modifying an oxide superconducting wire, comprising a heat treatment step of heat-treating a wire formed by covering an oxide

superconducting wire with a metal including silver in a pressurized atmosphere having a total pressure of at least 1 MPa and less than 50 MPa in the heat treatment, wherein

pressurization is started after the temperature of said atmosphere exceeds 400°C at a heat-up time before the heat treatment in said heat treatment step; and
wherein the speed of said pressurization is at least 0.05 MPa/min.

20. (Previously Presented) The method of modifying an oxide superconducting wire according to claim 19, wherein

said pressurization is started after the temperature of said atmosphere exceeds 600°C at the heat-up time before said heat treatment in said heat treatment step.

21. - 22. (Cancelled).

23. (Currently Amended) The method of manufacturing an oxide superconducting wire according to claim 1, further comprising maintaining the pressurized atmosphere below 1 MPa immediately before the pressurization is started from a temperature reducing 0.2 % yield strength of said metal.

24. (Currently Amended) The method of manufacturing an oxide superconducting wire according to claim 11, further comprising maintaining the pressurized atmosphere below 1 MPa immediately before the pressurization is started from a temperature reducing 0.2 % yield strength of said metal.

25. (New) The method of manufacturing an oxide superconducting wire according to claim 1, wherein the speed of said pressurization is increased at least 0.05 MPa/min until the pressure of 50 MPa is reached.

26. (New) The method of manufacturing an oxide superconducting wire according to claim 1, wherein the pressurization inhibits gas penetration in pinholes in the metal during heat-up time before heat treatment.

27. (New) The method of manufacturing an oxide superconducting wire according to claim 1, wherein the pressure of the atmosphere at heat-up time is continuously increased at a rate of at least 0.05 MPa/min such that the pressure of the atmosphere is maintained higher than a pressure inside the superconducting wire.